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EUROPE

Computer Evidence—A Comparative Approach in Civil and Common Law Systems: Part II

BY BERNARD E. AMORY AND YVES POULLET

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Approach in French and Belgian Law

Unlike the common law, the problem in French and Belgian law concerning the admissibility of evidence before the courts and tribunals, involves the satisfaction of legal requirements concerning, on the one hand, the storage of documents and, on the other hand, the conclusion of transactions. Is the practice of recording information on a computer and then destroying the original compatible with the law of evidence and, if so, under what conditions? Do transactions that today can be performed by computer (so-called "telematic transactions") satisfy the requirements of the law relating to evidence of legal acts?

Storage of Documents—General Provisions

Direct-recorded magnetic tapes (i.e., those containing information received directly by the computer and not having a written document as its original) probably constitute originals for the purposes of the Code civil. This hypothesis will not be examined here, however, for two reasons: first, only limited security is in fact provided by long-term storage on magnetic tapes and is relatively rare practice; and second, the production of this information for the purposes of legal proceedings entails its transcription onto computer documents, which must be considered copies.

It is not disputed that the recording by computer of information the source of which is a written document and the transcription of these magnetic or electronic impulses only computer documents (printouts or COM microfilms³³) make these documents copies.

Article 1334 of the Code civil provides that when the original still exists, copies are conclusive only to the extent of that contained in the original that can still be required to be produced. Their legal value is, therefore, in principle extremely precarious,³⁴ even though in commercial matters judges tend to accord them the same legal value as the original. However, given the fact of their novelty, copies in the form of computer documents would not inspire the same confidence as copies made by more traditional methods (e.g., photocopies).

This is still the situation in Belgian law, whereas in 1980 the French legislature amended several provisions of the Code civil relating to evidence. The new article 1348, paragraph 2 of the French Code civil effectively grants greater probative value to certain types of copy than does

article 1334: when the original no longer exists, a "faithful and lasting" copy may validly replace it. A "lasting" copy is defined as "any indelible reproduction of the original that involves an irreversible alteration of the medium." The criterion of fidelity is more difficult to satisfy: how can one judge the fidelity of a copy in relation to the original when this original has disappeared?³⁵

Computer documents are particularly liable to undergo operations that leave no trace. There is often a risk, therefore, that they will not satisfy the fidelity requirement laid down by the new article 1348 of the French Code civil. In order to satisfy this legal requirement, the norm A.F.N. 43061 sets the conditions for the production of microfilms intended to replace original documents. Complying with this kind of provision at present unfortunately requires the use of sophisticated and expensive equipment,³⁶ which few companies are in a position to purchase.

The Grand Duchy of Luxembourg is also intending to review the provisions of its Code civil dealing with evidence, notably by according micrographic reproductions and computer recordings the same probative value as written documents. They would benefit from a rebuttable presumption of fidelity to the original when the original has been destroyed in the normal course of business. This would be a case of a Civil law jurisdiction adopting an American law concept.

Storage of Documents—Specific Provisions

As well as the provisions of the Code civil, there are provisions in certain areas, notably tax, accountancy and employment and social security law, relating to the keeping and storage of certain documents.

Belgian law: From the point of view of *accountancy law*,³⁷ Belgian legislation does not prevent the keeping of account books in computer document form, as long as they satisfy the various requirements of the Accountancy law³⁸—notably the requirements of intelligibility and unalterability. The first will be satisfied if the computer documents are printed in an easily legible form (e.g., listings); the second by affixing a signature across the page of the account book and the computer document attached to it.³⁹ Accountancy documents, which must in principle be kept for ten years,⁴⁰ can be either the original or a copy, on microfilm or in a similar form.⁴¹

In *fiscal law*, computerised accounts can be used

as the basis of a decision by the fiscal administration even if the requirements of accountancy law (see above) have not been satisfied.⁴² As far as the fiscal authorities are concerned, the requirement of keeping documentary evidence depends in principle on the original documents, although administrative practice allows them under certain conditions to be kept on microfilm, including COM microfilm.⁴³

Finally, as far as *employment and social security law* is concerned, it has been stated⁴⁴ that Article 24 of the Royal Decree of 8 August 1980, on the keeping of employment and social security records allows employers to keep such records in a form different from that of the original provided that they are fully legible and that the form of reproduction used enables effective checks to be made.

French law: The Decree of 27 April 1982, introducing the *accountancy* programme and the draft accountancy law make provision for the keeping of computerised accounts.⁴⁵ These new legal provisions dealing with accounts have abolished the concept of account books and refer to "account documents and recordings" and, finally, give validity to "all reliable information systems."⁴⁶

The "General provisions of the New Accountancy Programme relating to the use of automatic processing" also provide that "the processing system must establish periodic reports on paper or on any medium providing precise conditions relating to guarantee and storage for the purposes of evidence."⁴⁷ This means that given the present state of the art, only listings or microfilms satisfying the A.F.N.O.R. Z 43061 norm⁴⁸ can be used.

No rules have been made governing the storage of accountancy documentary evidence. In this case, the common provisions of the law contained in the Code civil apply, examined above in relation to the requirement of storage either of the original or of a "faithful and lasting" copy.

On the *fiscal* level, there is effectively no rule governing the presentation and keeping of documents. However, accounts that do not comply with the relevant laws run the risk of being rejected by the tax authorities.⁴⁹ As for the keeping of documentary evidence, any type of copy is allowed, including electronic copies, as far as documents sent out by companies are concerned; on the other hand, documents received by companies must be kept in their original form.⁵⁰

Finally, *employment and social security* legislation allows the use of microfilm for the storage of information relating to pay slips, provided that certain conditions concerning consultation by the relevant authorities are satisfied.⁵¹

Evidence of Transactions—the Problem

The combination of computers and telecommunications, known by the term "telematics," enables the performance at long

distance of certain transactions, such as the electronic transfer of funds, the ordering of consumer products and the consultation of data banks.

If the advantage of telematics is the increased speed at which contracts can be concluded, the disadvantage is the transience of the operations. Information appears and disappears on the screen, making it difficult to keep a record of an operation.

Furthermore, even if it is possible to establish the existence and the details of a contract, the identity of the parties is not thereby certain. Identification of the terminal does not automatically lead to identification of the person who performs the transaction. Even a password or secret code only identifies the person who has access to the network and not the person who actually carries out the operation.

So evidence of the transaction raises three different questions:

1. evidence of the existence of a contract—the most far-reaching argument on this point is that which claims that the whole principle of a contract being in question, it is for the party claiming the benefit of it to show that it was properly concluded;

2. evidence of the details of the contract—the existence of the contract is not disputed, only some of its provisions (*e.g.*, delivery date, method of payment, etc.);

3. evidence of the identity of the parties to the contract.

These questions are examined below in relation to Belgian and French law together. Where a provision is particular to one jurisdiction alone, this fact is mentioned.

Evidence of Transactions—the Legal Requirements

The distinction between legal acts and legal facts: The Civil law makes a clear distinction between evidence of legal acts and that of legal facts. The distinction between the two notions is not a simple one.⁵⁴ "It is that the legal fact is a social fact, a fact of man. The 'I think therefore I am' leads one to the view that legal facts are linked to the individual and are so of his own accord. However, and this is where the distinction with legal acts lies, the consequences in law of legal facts are independent of the will of the author of the facts . . . a characteristic of legal facts is to leave undetermined the exact scope of their effects."⁵⁵

The distinction between legal acts and legal facts may not be straightforward, but the consequences for the law of evidence are important.

Legal facts can be proved by any means the law allows: presumption, oral evidence, confession, etc. On the other hand, the Code requires in principle that legal acts be proved by a signed written document with probative value.⁵⁶ This requirement has been reaffirmed on numerous occasions.⁵⁷ In particular, the judges have refused to consider as written documents exchanges of correspondence by teleprinter on the grounds that the originals, typed

at a distance, are not signed and cannot therefore be considered as signed documents.⁵⁸

The principle: Article 1341 of the Code civil lays down the principle that a legal act must be evidenced by a written document (either authenticated or signed by the author). The application of this principle to contracts concluded by telematics leads one to question the probative value of these contracts: agreements transmitted through telematics networks dematerialise; the written signature, which is the expression of the personality of the individual and his act of agreement to the contents of a document disappears.⁵⁹

Any surviving magnetic or electronic traces of the transaction cannot therefore, or so it would appear, have probative value or assist in establishing the truth for legal purposes. This rather bold assertion must be qualified. There are numerous exceptions. For example:

- transactions involving small amounts of money (up to 5,000 French Francs and 3,000 Belgian Francs) may be proved by any legal means. This will often be the case for operations performed at automatic bank tills and points of sale⁶⁰ and consultations of data banks.
- Article 1341 of the Code civil applies when the subject, i.e., the act, comes under the civil law (art. 1341, ¶ 2). In commercial matters, evidence is not restricted and all forms of evidence are admissible at the discretion of the judge.⁶¹

So the requirement of written evidence is felt less in the use of telematics in business than in its private use since the former often involves contact between traders, whereas the latter, in most cases, makes possible the conclusion at long distance of contracts between traders and non-traders. The act is therefore "mixed" and it is the quality of the defendant that is the determining factor for the purposes of the law of evidence.

Furthermore, according to many writers,⁶² article 1341 of the Code civil is neither a mandatory provision nor a public order provision. It, therefore, would be possible to derogate from the written document rule in an evidential clause stating that legal transactions performed on a telematics system may be proved by any means of law.

This clause could be in the form of a general regulation applicable to all telematic operations. This general regulation and in particular the evidential clause, coming from the person providing the information by computer, would have to be brought to the notice of the user.

The concept of an evidential clause is not unrealistic in the case of agreements concluded by written document and performed by telematics, as in the case of a subscription to financial information. In fact, the classification of this type of contract as a contract of hire and not as a

succession of service contracts for the supply of information allows the problem of evidence to be easily solved. The written agreement by which the database company undertakes to transmit financial information to the user can be analysed in two ways: is it a framework agreement that at each separate request for information is followed by agreements applying that agreement, or is it a single agreement on which subsequent requests for information are based, the answers to these requests constituting the performance of this single agreement?

If there is no evidential clause in the framework agreement and the first alternative is considered to be correct, there is a risk of evidential problems arising. On the other hand, if the second alternative is considered to be the correct one, the existence of an evidential clause does not significantly change the situation since the performance of an agreement would in any case by a legal fact,⁶³ which may be proved by any means under the law.

Finally, another situation in which article 1341 of the Code civil does not apply is when it has not been possible for the person who is pleading the fact to gather documentary evidence of the contractual obligation made in his favour (article 1348 of the Code civil) or when there is written evidence that does not strictly satisfy the requirements of contract law (article 1347).

According to several writers, the use of computer systems or telematic networks, at least by private individuals, constitutes the exception contained in article 1348 and even the one in article 1347. This interpretation is in line with the extensive jurisprudential theory of the impossibility of keeping written evidence to oneself.⁶⁵

The recent law of 12 July 1980 in France confirmed this jurisprudential development by providing for the exemption from the requirement of written evidence in cases where there is a "material impossibility" of obtaining such evidence. As F. Chamoux remarked, "it will be relatively easy for a judge to consider that it has been impossible for a written document to be drawn up, every time he finds himself dealing with the transmission of information that never appears in material form."⁶⁶

It is clear from this analysis of the scope of article 1341 of the Code civil that the principle of the signed written document (*instrumentum*) that is required for the proof of a legal act is subject to broad exceptions that, in the final analysis, mean that it very rarely applies to telematic transactions.⁶⁷

Toward Technical Solutions

It can be seen that the legal and jurisprudential exceptions to the long-established principles that govern the law of evidence in the common law system allow, in the majority of cases, the admissibility of computer documents. It can also be seen that the requirements of the law of the continental countries examined above very often make allowance for modern techniques of storage of

documents and conclusion of contracts involving computers and telematics.

This does not mean, however, that all problems are solved. For if a document is declared admissible by a court, if a party to a contract can rely on a telematic transaction without having a signed written document, he still has the task of convincing the judge of the reliability of such documents. As can be seen from the opinion of an American judge, this will not always be easy: "As one of the many who have received computerised bills and dunning letters for accounts long since paid, I am not prepared to accept the product of a computer as the equivalent of Holy Writ."⁶⁸

It is in relation to telematic transactions that the most acute difficulties will arise. This article is not going to give an analysis of the technical methods of providing evidence.⁶⁹ Instead, certain techniques will be outlined that may be able to provide a solution to the problems of evidence on the three levels at which they arise.⁷⁰

Evidence of the Existence of the Agreement

At present, facsimile terminals function both as receivers and copiers. It would be possible to use them to show that a call has been received on a particular date at a particular time. It would also be possible for the terminal to be equipped with a printer using different characters depending on whether or not the message was coming from a particular user. However, that would be an expensive solution.

Evidence of the Identity of the Parties

It has already been pointed out that the use of a secret code (or subscription number) only allows the identification of the holder of that subscription or the person holding access to the system but not the actual person who concluded the contract. Therefore, some technical means would be required to enable a physical characteristic of an individual to be recognised at a distance. These technical means would be particularly useful in relation to videotex and the electronic transfer of funds. Machine-readable signatures, fingerprints or voiceprints are all possibilities but are still at the research or prototype stage.

Another possibility might be the adoption of a cryptograph system using a public key; "it would be technically possible to 'sign' the information in as convincing a way for the parties as a traditional signature on a paper document."⁷¹ The advantage of this system would be that it would establish at the same time both the identity of the parties and the contents of the agreement.

Evidence of the Contents of the Agreement

Whatever the type of telematic contract, it is important in the event of a dispute to establish the contents of the agreement (e.g., price, quantities ordered) or the details of the performance due under it (e.g., information transmitted by videotex). This gives rise to two problems.⁷²

It must be proved that the contents of the transaction have not been altered by the recipient of the transmission and that they were not altered during the course of that transmission. Apart from the use of codes accessed by key, there appear to be no effective ways of dealing with this. It is possible that the use of characters that differ like telex characters could allow transmitted messages to be traced but the reliability of such a trace could never be complete. Consequently, the presumptive value that would attach to it would be limited and it would be even more difficult to accord it the character of contradictory evidence.

The cost and complexity of most of the technical solutions that have just been outlined are based on the assumption that both the supplier of telematic services and the user have sufficient financial and technical means at their disposal to enable them to put such solutions into practice. When telematic services are offered to users who do not have such resources at their disposal, as in the case of private individuals, it is suggested that legislative solutions should be enacted, with the double aim of protecting the interests of consumers vis-à-vis a tempting and simple type of contract and to impose requirements as to the security of procedures for the recording of messages transmitted by the user.

A good example of such a measure is the English A.V.I.P. code, which provides for the written confirmation of an order in a contract concluded by telematics but performed by other means, in the framework of the PRESTEL experiment.⁷³ It is a measure specifically aimed at the protection of consumers and, it must be said, imposes a heavy burden on those administering such systems. The nature of this written confirmation must be examined from the legal point of view—is it simply written evidence with probative value, or does it prove the existence of the contract?

The American system established by the Electronic Fund Transfer Act⁷⁴ is also worth mentioning. In a legal action between a bank and a customer a special procedure comes into play that involves a reversal of the burden of proof. It is for the bank to show that the reliability and security of its system provide as absolute a guarantee as possible of the absence of errors in the recording of transactions by telematics.⁷⁵ It must be said that after four years' experience, certain systems (including the Belgian automatic bank tills and points of sale) have proved to be very reliable and that the media that they produce (computer recording tape) "display characteristics that will allow them to play a crucial role in the evaluation of evidence by the judge in a legal action."⁷⁶

Is the solution to this problem the "memory card" distributed by certain suppliers and tested in various areas? The memory card held by the user of a system offers him a means of keeping a record of all the transactions that he had performed. "This information remains in his possession."⁷⁷ In short, it is not only the person who runs the system who

unilaterally holds the evidence. The memory card effectively provides the user with the means of obtaining counter-evidence. However, as Delahaye and Grissonnanche note, the possibility cannot be excluded that an error made at the moment of the transaction will be recorded on the card "and that in the end, it is the person who runs the system who on a technical level retains the mastery of all the transactions recorded on the different media, including memory cards."⁷⁸

Conclusion

According to René David,⁷⁹ it is primarily the rules of procedure that account for the very different approaches adopted on the one hand by the Civil Law and on the other hand by the Common Law. It is for this reason that it was decided that this article should deal separately with the admissibility of computerised documents as a form of evidence in one legal system and then the other.

There are striking similarities between the two systems, even though a wide gulf separates the reasoning behind them. The law is hard pressed to recognise the existence of computerisation. In the Common Law, "the fundamental problem is the rule that prohibits hearsay evidence."⁸⁰ In the Civil Law system, the obstacle is the requirement of a written document. The work of the courts is being succeeded by legislative action. There are many technical questions that cannot be answered by judges and require special rules; so, for example, without mentioning more specialised fiscal and accounting regulations, the Civil Evidence Act 1968 and the French Law of 12 July 1980, lay down certain principles relating to the admissibility by the courts of "computer-produced evidence."

These legislative principles should be enacted in sufficiently general and flexible terms to allow for technical development. In applying these principles, the law prefers to act by means of "recommendations" or "norms" that can more easily be amended and are less binding. As far as possible the linking of legal definitions and concepts to a technical subject should be avoided and the job of translating the deliberately hazy concepts adopted by the legislation should be left to more specialised practitioners who are conscious of the needs and the constraints of the technology on the one hand and of business on the other.

Over and above these national rules and "quasi-rules," there is also a move toward some sort of international regulation since the information market is international by nature. In the words of the Secretary General of the United Nations Commission on International Trade Law, "it is therefore urgent that measures be taken at the international level to establish rules relating to the legal acceptance of commercial data transmitted by telecommunications."⁸¹ The rules relating to the admissibility of computerised documents and the rules relating to signatures cannot differ from one country to another in a domain where frontiers no longer exist and where data that is signed and

transmitted electronically must be identifiable at any place at any time.

As the Secretary General of the U.N. Commission remarked,

"faced with the necessity of adapting to the widespread use of computers for commercial and administrative purposes, a number of countries have amended their relevant information in order to allow this usage and to accept as a form of evidence documents recorded by computer or data storage systems, provided that they satisfy certain criteria. The disparities between the criteria which are used to determine their legal value together with the refusal by other countries to accord them such value create serious problems when computerised records stored in one country are to be used as evidence in a legal action in another country."

As traditional jurists, we started off from the assertion of the originality of each national law of evidence; it is clear that the existence of an international economy based on transborder data flow makes it necessary for use to consider the need for an international law of evidence in the computer field. It is for us, as jurists, to take up this challenge not by sacrificing ourselves to an ever-changing technology but by broadening our legal concepts: what is a signature? What is the finality of evidence in law? What is the essence of the distinction between a legal act and a legal fact?

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33. "Computer Output Microfilm (COM) Translates into Visible and Legible Form Information Which Appears on a Computer's Magnetic Tape," in F. Chamoux, *supra* note 1, at 138.

34. Chamoux, "La loi du 12 juillet 1980: une ouverture sur de nouveaux moyens de preuve," J.C.P. 1980, II, 13491.

35. *Id.*

36. For a technical description, see Bougon, "Naissance d'une méthode et d'une technique nouvelle en micrographie," C.I.M.A.B. Encyclopédie, Sept. 1980).

37. See Van Wymeersch, Autenne & de Lame, "Le statut comptable et fiscal de l'informatique," in Actes du cycle de cours et conférence sur les contrats informatiques (Namur 1984).

38. See the Law of 17 July 1975, Art. 8, § 2 and Art. 9, § 1, and the Royal Decree of 12 September 1983, Art. 8.

39. P. Lurkin, *Le Nouveau Droit Comptable Belge* 191 (Brussels, F.E.B., 1979).

40. Law of 17 July 1985, Art. 9, § 2, and Royal Decree of 12 September 1983, Art. 9.

41. P. Lurkin, *supra* note 39, at 22.
42. Gent, 3 June 1980, J.C.B. 1982, at 405 on the keeping of accounts by lawyers and other liberal professions, see Parliamentary Questions, No. 252 of 15 March 1984, Q.R. Chambre, 17 April 1984, and No. 224 of 18 April 1984, Q.R. Sénat, 5 June 1984.
43. For more details, see Van Wymeersch, Autenne & de Lame, *supra* note 37, at 9, 10.
44. Parliamentary Question No. 212 of 26 September 1980, Q.R. Chambre, 4 November 1980.
45. For a more detailed commentary on these provisions, see Bensoussan, "Droit et comptabilité informatique," 01 *Informatique*, April 1983, at 110, 111; May 1983, at 102, 103; June-July 1983, at 140, 141.
46. Bensoussan, *supra* note 45, 01 *Informatique*, April 1983, at 111.
48. *Cf. supra*.
49. *Cf. "La valeur légale des microformes," C.I.M.A.B. Encyclopédie*, April 1975, at 3.
50. *Id.*
51. Circular No. 38 of 29 July 1969, Ministry of Work, Employment and Population.
52. See Poulet & Thunis, "Introduction aux aspects juridiques de la télématique," in "La Telematique, Aspects, Techniques, 1 Juridiques et socio-politiques," in *Actes du Colloque de Namur 60* (Gent 1984).
53. Chamoux, "La force probante des supports modernes d'information," *Informatique et Gestion*, No. 126, at 25, 26 (1981).
54. *Cf. Hauser, Objectivisme et subjectivisme dans l'acte juridique* (Thesis, Paris 1970).
55. J.-L. Aubert, *Notions et rôle de l'offre et de l'acceptance dans la formation du contrat 180* (Thesis, Paris 1970).
56. Note that the proposals for the reform of the law of evidence in the Grand Duchy of Luxembourg would give a broader interpretation of the concept of the signature by including any mark individually identifying a person by which he manifests his consent. Such an interpretation would recognise the value of the "electronic signature" (e.g., secret identity codes).
57. Notwithstanding Recommendation No. R (81) 20 of 11 December 1981, of the Committee of Ministers of the Council of Europe that requests the governments of those Member States whose legislation imposes evidence by written document "to examine the possibility of abolishing this requirement." See X. Linant de Bellefonds, "L'informatique et le droit," P.U.F. 1981, at 43.
58. Cass. comm. fr. 19 Nov. 1973, Bull. Civ. 1973, IV, no. 333; G. Goubeaux, & D. Rihl, *Preuve*, Dalloz, Rép. dr. Comm.
59. This argument is not conclusive since, as F. Chamoux points out (*supra* note 1), a secret code is a much safer method of identification than a signature. It is also worth noting that a whole series of draft international conventions (or cheques, promissory notes, bills of exchange, commercial transport documents) accept mechanical or electronic means of identification (*cf. "Aspects juridiques du traitement automatique des données," Report of the Secretary General, United Nations Commission on International Trade, A/CN.9/254, 8 May 1984, 3 No. 8*). *Cf. the concept of signature in the proposed Luxembourg reforms, supra* note 56.
60. See D. Syx, *Aspects juridiques du mouvement électronique de fonds* (Brussels, Kredietbank, 1982).
61. See 1 Van Ryn & Heenan, *Principes de droit commercial* 484 (2d ed. 1975), on Article 109 of the French Commercial Code, implemented by the Law of 12 July 1980 ("With regard to traders, commercial acts can be proved by any means.").
62. Malengraux, "Le droit de la preuve et la modernisation des techniques de rédaction, de reproduction et de conservation des documents," in *Annales de Droit de Louvain* 117 (1982), and the references cited at note 28. *Cf. in the jurisprudence*, recently Cass. française 7 January 1982, Bull. cass. 1982, III, 4 ("The Court of Appeal did not comply with the terms of the new Article 202 of the Procedural Code by rejecting written dispositions on the grounds that their authors had not respected the conditions relating to form provided by the Article, whereas the penalty for non-compliance with these conditions is not nullity.").
63. Catala, *La nature juridique du paiement* (Paris, L.D.G.J., 1961). In effect, it is the legislation that, de plano, attaches an extinctive effect to this factual situation that constitutes the satisfaction of the creditor.
64. See D. Syx, *supra* note 60; Linant de Bellefonds, *supra* note 57, at 122.
65. See Malengraux, *supra* note 62, at 116; Van Rijn & Heenan, *supra* note 61, at 481; Malinvaud, "L'impossibilité de la preuve écrite," J.C.P. 1971, I, 2468. In Belgian jurisprudence, Liège, 20 June 1978, Jur. Liège, 21 October 1978.
66. Chamoux, *supra* note 34.
67. As concerns arbitration, the State Arbitration Commission of the USSR has recommended to arbitration tribunals that they give transactions concluded by the computer the same value as those concluded by written document. See 6 *Transnational Data Rep.*, No. 2 at 75.
68. *Perma Research & Development v. Singer Co.*, 452 F.2d 111 (5th Cir. 1976) (dissenting opinion of Judge Van Graafeiland).
69. For an analysis of these technical methods, see Grissonnanche, "Data Protection and Data Security Technology," A.D.I. typescript, G.M.D., N.C.C., at 24 (1983); Chamoux & Grissonnanche, "Preuve et sécurité dans les réseaux informatiques," Rapport de synthèse, typescript document, September 1980, at 111.
70. See the "levels" of evidence envisaged by Delahaie & Grissonnanche, "Les nouveaux moyens de paiement ont-ils besoin d'un cadre juridique spécifique?" 24 *Les Cahiers de Droit* 292 (1982).
71. "Aspects juridiques du traitement automatique des données," United Nations Commission on International Trade, A/CN.9/238 18 (March 1983).
72. See Chamoux, Delahaie & Grissonnanche, *supra* note 69, at 36.
73. This concerns orders of goods and services from mail order companies.
74. The Electronic Funds Transfer Act contains other interesting provisions, such as the obligation on banks to send frequent account statements to enable the client to follow developments in his account.
75. Compare the position of the French Conseil économique et social ("La monnaie électronique," Opinion and Report of the Conseil économique et social, 1982, No. 12, J.O. (Paris 1982), published in *Documentation Française*), which is of the opinion, on the one hand, that the initiator of a technique has, by the choice that he exercises, the control and the responsibility of the level of reliability of a system, and on the other hand, the damage suffered by the banker in the event of an incident is

relative whereas that suffered by the customer is of a more serious nature and finally the disproportion in the means at the disposal of the customer to open and conduct legal proceedings is already enough to put the latter in a position of inferiority.

76. D. Syx, "Le transfert électronique de fonds: un droit hésitant face à une réalité galopante," in "La Télématicque, Aspects techniques, juridiques et socio-politiques," 2 Actes du Collège de Namur.

77. The Conseil économique et social in the opinion cited *supra* note 75 seems to think so. The "memory card" system brings an element of response to the risk of imputation by error in the customer's account as well as to the risk of bad faith by the user. In case of difficulty, the confrontation between the two recordings can constitute an element of evidence for the courts and at the

least a dissuasive factor for defrauders. "La monnaie électronique," *supra* note 75, at 578.

78. Delahaie & Grissonnanche, *supra* note 70.

79. R. David, *Les grands systèmes de droit contemporains* § 316 (4th ed. 1971).

80. Kirby, "Aspects juridiques de la technologie de l'information," in *Une analyse préliminaire des problèmes juridiques dans l'informatique et les communications* 83 (Paris, OECD, 1983).

81. U.N.C.I.T., "Aspects juridiques du traitement automatique des données," A/CN.9/238, No. 5, at 2.

82. *Id.*

INTERNATIONAL

Glossary of International Trade Terms

International trade has its own vocabulary. The following glossary provides definitions of many of the most-often used international trade terms in the *Adviser*. These definitions are adapted from *Business America*.

Ad valorem tariff. A tariff calculated as a percentage of the value of goods cleared through customs, e.g., 15 percent ad valorem means 15 percent of the value.

Balance of payments. A tabulation of a country's credit and debit transactions with other countries and international institutions. These transactions are divided into two broad groups: Current Account and Capital Account. The Current Account includes exports and imports of goods, services (including investment income), and unilateral transfers. The Capital Account includes financial flows related to international direct investment, investment in government and private securities, international bank transactions, and changes in official gold holdings and foreign exchange reserves.

Balance of trade. A component of the balance of payments, or the surplus or deficit that results from comparing a country's expenditures on merchandise imports and receipts derived from its merchandise exports.

Bilateral trade agreement. A formal or informal agreement involving commerce between two countries. Such agreements sometimes list the quantities of specific goods that may be exchanged between participating countries within a given period.

Bounties or grants. Payments by governments to producers of goods, often to strengthen their competitive position.

Codes of conduct. International instruments that indicate standards of behavior by nation states or multinational corporations deemed desirable by the international community. Several codes of conduct were negotiated during the Tokyo Round that liberalized and harmonized domestic measures that might impede trade, and these are considered legally binding for the countries that choose to

adhere to them. Each of these codes is monitored by a special committee that meets under the auspices of GATT and encourages consultations and the settlement of disputes arising under the code. Countries that are not Contracting Parties to GATT may adhere to these codes. GATT Articles III through XXIII also contain commercial policy provisions that have been described as GATT's code of good conduct in trade matters. The United States has also encouraged the negotiation of several "voluntary" codes of conduct, including one that seeks to specify the rights and obligations of transnational corporations and of governments.

Commodity. Broadly defined, any article exchanged in trade, but most commonly used to refer to raw materials, including such minerals as tin, copper and manganese, and bulk-produced agricultural products, such as coffee, tea and rubber.

Countervailing duties. Special duties imposed on imports to offset the benefits of subsidies to producers or exporters in the exporting country. GATT Article VI permits the use of such duties. The Executive Branch of the U.S. Government has been legally empowered since the 1890s to impose countervailing duties in amounts equal to any "bounties" or "grants" reflected in products imported into the United States. Under U.S. law and the Tokyo Round Agreement on Subsidies and Countervailing Duties, a wide range of practices are recognized as constituting subsidies that may be offset through the imposition of countervailing duties.

The Trade Agreement Act of 1979, through amendments to the Tariff Act of 1930, established rigorous procedures and deadlines for determining the existence of subsidies in response to petitions filed by interested parties such as domestic producers of competitive products and their workers. In all cases involving subsidized products from countries recognized by the United States as signatories to the Agreement on Subsidies and Countervailing Duties, or countries that have assumed obligations substantially equivalent to